

## ABSTRACT OF THE DISCLOSURE

A semiconductor chip includes: a semiconductor substrate; a penetrating electrode which is formed through the semiconductor substrate from a first surface to a second surface of the semiconductor substrate and has a projection which projects from the second surface; an insulating layer formed over an entire surface of the second surface. The insulating layer includes a first insulating section formed in a region around the projection and a second insulating section other than the first insulating section. The second insulating section is formed to be thinner than a thickest area of the first insulating section.